

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

1. (currently amended) A method for analyzing machine data, the machine data representing at least one condition of a machine, comprising the steps of:  
storing said machine data in a data system;  
defining a ~~first~~ testing procedure by selecting from a plurality of pre-defined owner inputs each associated with one or more diagnostic processes, wherein at least one of the owner inputs is associated with one or more diagnostic processes that are different from the one or more diagnostic processes with which at least one of the other owner inputs is associated;  
processing said machine data based on said ~~first~~ testing procedure to determine a machine exception; and  
generating a notification in the event of a machine exception;  
wherein defining the testing procedure includes conditioning at least one diagnostic process to execute automatically based on the results of at least one other diagnostic process.
2. (original) The method, as set forth in claim 1, wherein said pre-defined owner input comprises a selected test and defined parameters for said test.

3. (original) The method, as set forth in claim 1, wherein said notification is relayed to a notification device.

4. (original) The method, as set forth in claim 3, wherein said notification device is a hand held communications device.

5. (currently amended) The method, as set forth in claim 1, wherein said first testing procedure is run on a sequencer.

6. (original) The method, as set forth in claim 1, wherein said storing step comprises the steps of:

storing said machine data on said machine in packets; and  
transferring said packets via a communications network to said data system.

7. (original) The method, as set forth in claim 1, wherein said storing step includes the step of:

streaming said machine data from said machine to said data system via a communications network.

8. (currently amended) A system for analyzing machine data, the machine data representing at least one condition of a machine, comprising:

a data system configured to store machine data;

an owner input device configured to accept a plurality of different owner inputs, each associated with one or more diagnostic processes, wherein at least one of the owner inputs is associated with one or more diagnostic processes that are different from the one or more diagnostic processes with which at least one of the other owner inputs is associated; and

an analyzer configured to accept a procedure selected by an owner from said plurality of owner inputs, ~~said analyzer configured to~~ process said machine data based upon said procedure to determine a machine exception<sub>1</sub> and generate a notification in the event of a machine exception<sub>1</sub>;

wherein the analyzer is configurable to execute at least one diagnostic process automatically based on the results of at least one other diagnostic process.

9. (original) The system, as set forth in claim 8, further comprising:  
a communications network for relaying said machine data from said machine to said data system.

10. (original) The system, as set forth in claim 9, wherein said communications network comprises wireless communication means.

11. (original) The system, as set forth in claim 8, wherein said procedure comprises a test selected by said owner and at least one parameter defined by said owner and associated with said test.

12. (original) The system, as set forth in claim 9, further comprising:  
a notification device for receiving said notification via said communications  
network.

13. (original) The system, as set forth in claim 12, wherein said  
notification device comprises a hand held communication device.

14. (currently amended) A method for analyzing machine data, the  
machine data representing at least one condition of a machine, comprising the steps of:  
storing said machine data in a data system;  
defining at least one testing procedure by selecting from a plurality of  
owner inputs, each associated with one or more diagnostic processes to be associated  
with said machine data, wherein at least one of the owner inputs is associated with one  
or more diagnostic processes that are different from the one or more diagnostic  
processes with which at least one of the other owner inputs is associated;  
processing said machine data based upon said procedure;  
determining a machine exception from said procedure; and  
generating a report in the event of a machine exception;  
wherein said defining step includes the steps of:  
selecting at least one test to be associated with said machine data;  
defining at least one parameter associated with said at least one  
test;

defining at least two limits for the at least one parameter, wherein  
machine data that exceeds at least one of the limits is considered a machine exception;

and

wherein said processing step includes running said at least one test in  
relation to said machine data.

15. (canceled)

16. (original) The method, as set forth in claim 14, wherein said processing step is performed by an analyzer based upon said procedure which is defined by an owner.

17. (currently amended) A system for analyzing machine data, the machine data representing at least one condition of a machine, comprising:

a data system configured to store machine data; and

an owner input device configured to accept a plurality of different owner inputs, each associated with one or more diagnostic processes, wherein at least one of the owner inputs is associated with one or more diagnostic processes that are different from the one or more diagnostic processes with which at least one of the other owner inputs is associated; and

wherein the owner input device is configured to accept owner input to:

select at least one test to be associated with said machine data;

define at least one parameter associated with said at least one test;

define at least two limits for the at least one parameter, wherein  
machine data that exceeds at least one of the limits is considered a machine exception;  
and

an analyzer configured to accept a procedure selected by an owner from said plurality of owner inputs, said analyzer configured to process said machine data based upon said procedure to determine a machine exception and generate a report in the event of a machine exception.

18. (original) The system, as set forth in claim 17, further comprising:  
a communications network for relaying said machine data from said machine to said data system.

19. (original) The system, as set forth in claim 17, wherein said procedure is comprised of at least one test selected by said owner, said test having at least one associated parameter defined by said owner.

20. (currently amended) A method for providing an exception-based report, said report based on machine data representing at least one condition of a machine, comprising the steps of:

analyzing one or more sets of machine data based on prior input made on board the machine by an owner selecting a testing procedure for generating said one or more sets of machine data, wherein the prior input includes defining a testing procedure by selecting from a plurality of pre-defined owner inputs each associated with one or

more diagnostic processes, wherein at least one of the owner inputs is associated with one or more diagnostic processes that are different from the one or more diagnostic processes with which at least one of the other owner inputs is associated;

checking for machine exceptions in said machine data; and

generating a report in the event of a machine exception.

21. (original) The method, as set forth in claim 20, wherein said report comprises an exception alert and wherein said alert is relayed to a notification device.

22. (original) The method, as set forth in claim 21, wherein said notification device comprises a portable communication device and wherein said alert is relayed by wireless means.

23. (currently amended) A system for providing an exception-based report, said report based on machine data representing at least one condition of a machine, comprising:

an owner input device located on board the machine and configured to accept a plurality of different owner inputs, each associated with one or more diagnostic processes, wherein at least one of the owner inputs is associated with one or more diagnostic processes that are different from the one or more diagnostic processes with which at least one of the other owner inputs is associated; and

an analyzer configured to process one or more distinct sets of machine data based upon prior selection of at least one of said plurality of different owner inputs by an owner;

said analyzer configured to check for machine exceptions in said machine data;

said analyzer configured to generate a report in the event of a machine exception; and

a notification device for receiving said report.

24. (original) The system, as set forth in claim 23, wherein said report comprises an exception alert and wherein said notification device is a portable communications device.

25. (original) The system, as set forth in claim 24, further comprising:  
a communications network for wirelessly relaying said report to said notification device.

26. (original) The system, as set forth in claim 25, further comprising:  
a data system for storing said machine data; and  
wherein said communications device relays said machine data from said machine to said data system.

27. (Canceled)



28. (New) The method of claim 20, wherein the one or more sets of machine data includes data from another machine.

29. (New) The system of claim 23, wherein the one or more distinct sets of machine data, which the analyzer is configured to process, includes data from another machine.